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## REMARKS

With close attention to the Office action of November 19, 2003, claims 1-20 are under consideration, claim 21 having been withdrawn from consideration as subject to restriction requirement. Examiner had objected to claim 19 only as dependent from rejected claims, indicating that it would be allowable if rewritten independently.

By the present response, claims 1, 5, 6, 9, 12-17, 19 and 20 are amended. Claims 2, 3, 4 and 18 are resubmitted (represented). Claims 7, 8, 10 and 11 are cancelled. Claim 21, as noted, is withdrawn from consideration, pending the possible filing of a divisional application.

Examiner's indication that claim 19 is objected to as being dependent upon a rejected base claim, and would be allowable if rewritten in independent form is acknowledged. Applicant accordingly rewrites claim 19, and so also overcomes the rejection under 35 U.S.C. § 112 regarding the limitation of claim 1, line 24 of "the film sealing and cutting apparatus." Proper antecedent basis is provided in claim 19, as rewritten, and it should accordingly be held patentable in the application.

Similarly, in rewriting claim 1, the Section 112 rejection is overcome, as after the limitation "a second conveyor" and the additional limitation is added: - "film sealing and cutting apparatus". The claim then goes on to recite the features of the film sealing and cutting apparatus.

In rewriting claim 1, it is submitted that the claim now includes claim limitations of which depart decidedly from the cited art. Thus, claim includes the following additional limitation:

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the upper head and lower head traveling mutually toward and away from each other, at least the upper head moving about a predetermined closed geometric path, and engaging once every movement cycle to effect a sealing and cutting operation between adjacent film wrapped products,

Claim 1 is also further amended thus:

the upper head and the lower head each maintaining a fixed angle of orientation relative to a direction of movement of products along the first conveyor during travel of the upper head about the predetermined path,

Examiner rejected claims 1-17 under § 103(a) over Fosshage, '709 in view of Neagle et al. '475. Examiner contends that Fosshage includes an upper and lower head which maintains "a fixed angle of orientation relative to a direction of movement of products (A) along a first conveyor (13)."

It is requested that Examiner please reconsider this interpretation, as it is believed that Fosshage does not maintain such a fixed angle of orientation for instead, Fosshage uses a rotating sealing and crimping head assembly (29) shown in Figs. 2-5. The head assembly includes radially spaced knife blocks (41a) and (41b) which are spaced 180° apart from one another. These knife blocks are caused to rotate about a shaft

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(40). During rotation, the angle of the knife blocks changes relative to the direction of products (A) as they move on a

This is in sharp contrast to the presently claimed apparatus in which the upper and lower heads travel mutually toward and away from each other about a predetermined closed geometric path [which results from an epicyclic drive], but during their travel about this path, these heads advantageously maintain a fixed angle of orientation relative to the direction of movement of products along the first conveyor. This achieves efficiency and high throughput as packages move rapidly through the heat sealing procedure. The fixed angle during movement about a closed path is entirely different from the arrangement taught by Fosshage.

Claim 1 has been amended accordingly to recite these features, which are not new matter as they are drawn from the specification in the following locations:

Page 20, lines 21-26:

upper head 156 is carried having a fixed angle of orientation, preferably with vertical axis 200, and that lower head 164 is likewise carried having a fixed angle of orientation, preferably in alignment with vertical axis 200.

Page 20, line 26, through page 21, line 11:

upper head 156 and lower head 164 are maintained synchronously and mutually toward and away from each other about a predetermined path. Thus, cutter portion 158 of upper head 156 and platen head portion 182 of lower head 164 are engaged once for every full rotation of upper gear 142 and lower gear 162.

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Additionally, due to the rotation of upper head 156 with respect to eccentric axis 152 and lower head 164 with respect to eccentric axis 172, it is appreciated that upper head 156 and the lower head 164 rotate in and out of engagement while maintaining a fixed angle of orientation, preferably in-line with a vertical axis 200. Further, it is appreciated that cutter portion 158 and the platen head portion 182 each maintain a predetermined path, preferably circular, due to the epicyclical arrangement with gears 146, 148 and 150.

Therefore, the combination of Fosshage and Neagle et al. fails to suggest the claimed arrangement which is advantageous in that it increases speed and accuracy for high throughput and efficiency of the presently inventive shrink-wrap machine.

Accordingly, claim 1 should be allowable.

Claims 2-4 remain in their present form and should be allowable with claim 1.

Claim 5 is amended as to be syntactically consistent with claim 1, providing that each of the upper and lower heads are maintained with the vertical axis orientation relative to the direction of movement of products along the first conveyor.

Claim 6 is similarly consistent syntactically and is more specific in that the upper and lower heads are recited as each being maintained with a vertical axial orientation relative to a direction of movement of products along the first conveyor by an epicyclical engagement therewith.

Such arrangements are not disclosed by the combination of Fosshage and Neagle, et al. These claims accordingly should be

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held patentable with claim 1. Claims 7 has been cancelled and so also are claims 10 and 11, as they would be redundant.

With regard to claim 9, amendment is indicated for syntactical syntax consistency, and should be allowable with claim 1.

Claim 12 recites that the upper and lower head each travel mutually toward and away from each other as each of the upper and lower heads moves about a closed geometric path. Such an arrangement is not disclosed in either Fosshage or Neagle, et al.

Similarly, claim 13 provides that the upper head and lower head travel each mutually toward and away from each other about a circular path, and again, such is not disclosed by this combination of references.

Accordingly, claims 12 and 13 should be held allowable with claim 1. Claims 14-17 have been amended to clarify the language and make it more definite with better syntax. These claims should be held allowable accordingly with claim 1.

Claim 18 remains dependent from claim 1 without further amendment, and so should also be allowable with claim 1.

Claim 19 has been rewritten to include all of the limitations of the claims from which it depended and, in addition, there is inserted after the clause "a second conveyor" a further limitation of --film sealing and cutting apparatus--. Thus, proper antecedent basis is provided for the following expression reciting the features set forth. Therefore, on the basis indicated by the Examiner, claim 19 should be patentable in the application.

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Claim 20 was rejected over the combination of Fosshage, Neagle et al. and Sautter et al. '470. Examiner contended that Fosshage has a head which maintains a fixed angle of orientation relative to the direction of movement of products (A) along a conveyor (13) but closer examination of the arrangement of Fosshage shows that the heads are carried upon a rotating assembly so that the angle of the heads changes at all times as the head is rotating.

The rotating head arrangement of Fosshage is different from what is set forth in claim 20, which has been amended to recite the feature of sealing and cutting apparatus which maintains a fixed angle of orientation that does not change relative to a direction of movement of products along a first conveyor during movement of the sealing and cutting apparatus, and also recites that the path of the cutter portion and platen head portion are synchronously maintained mutually toward and away from each other by movement about a closed geometric predetermined path, wherein the platen head portion and the cutter head portion are engaged once every full movement cycle of the upper and lower heads to effect a sealing and cutting operation between adjacent film wrapped products.

Again, the combination of Fosshage, Neagle et al. and Sautter et al. fails to provide the advantageous combination set forth.

Accordingly, it is submitted that claim 20 should properly be allowable in the application for the reasons noted.

In view of the foregoing, the remaining claims are respectfully submitted to be properly allowable in the application, with the proviso that claim 21, withdrawn from

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consideration as having been subject to a restriction requirement, should be permitted to remain in the application pending the possible filing of a divisional patent application.

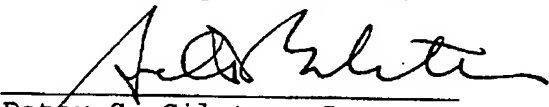
The remaining references are not believed to be more pertinent.

While it is believed that the foregoing resolves all remaining issues, if Examiner believes there is any remaining issue, which could be readily resolved or other action could be taken to advance this application, such as Examiner's amendment, it is requested that Examiner please telephone the undersigned. If necessary to effect a timely response, this paper should be considered as a petition for extension of time of length sufficient to be considered timely.

Any fees required, to the extent not covered by payment submitted herewith, are authorized to be charged to Deposit Account No. 07-1985.

Respectfully submitted,

Date: 19 Feb 04

  
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Attachment(s): Transmittal with Certification of Fax Transmittal  
Revocation and Power of Attorney

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